EVALUATING EXISTING DATA

Prior to discovery and during PAs and SIs we sometimes have the ability to evaluate existing data. The goal prior to discovery is to determine whether a false negative test result exists. The goal during PA and SI is to determine whether the data can serve as our own SI would in evaluating the site under the Hazard Ranking System (HRS) and in prioritizing the site before reaching the Regional Decision Team (RDT). The following are rules of thumb:

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-What were the data quality objectives (DQOs) for the study? Are they compatible with our evaluation objectives? A DQO fact sheet is under development for the Site Assessment program at EPA Headquarters.

-Were samples grab or composite? We like to use biased-high grab samples for HRS screening. Composite or grab samples may be appropriate for prioritization.

-What substances were the samples analyzed for? TPH? Major cations? The full Hazardous Substances List? There should be enough analytes for us to characterize substances associated with past or present use of the site, or from reactions due to substances at the site. For example, HCl acid washing may cause a heavy metals release.

-Was the test method compatible with our needs? Just because a sample doesn't fail TCLP, for instance, doesn't mean a significant release isn't occuring. Do we want to evaluate total or dissolved metals? Are the detection limits reasonable----for us to compare the sample to the MCL, for example?

-Was the location of the samples suitable for our evaluation? Were the wells deep enough? Were the samples at, or en route to, target locations? Did they collect sediment as well as aqueous samples in the surface water pathway?

-Were background samples taken for each media? Sources, except for contaminated soil, need no background for HRS screening. To test for releases to ground water and surface water, however, representative background samples should be available. If we are at the top of a watershed at a mining site, a geologically similar adjacent drainage may provide a "representative background". If we are in an area with a ground water plume, something beyond the observed effects of the plume may qualify for representative background (for site screening) where a limited selection wells is available.

-Were other QA/QC samples taken during the sampling event? If CLP samples are available, the following samples are taken the field: duplicate, triple volume, rinsate, blank. A clean background sample may serve for a trip blank. If the samples are from a drinking water program, the samples may have been analyzed by a Certified drinking water lab. The lab QA samples may not be mandatory in this case for us to use the samples in leiu of SI sampling. The logic is that the lab's certification offers QA/QC, rather than the procedures documented in the CLP paperwork.

Region VIII Site Assessment Program Quick Sheet:
thoughts off the top of our heads, a living document.

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